

AUTOMATIC RED EYE DETECTION AND CORRECTION IN DIGITAL IMAGES

ABSTRACT OF THE DISCLOSURE

A method for the automatic detection and correction of red eye in a digital image is disclosed. The method includes defining a digital image in a hue-saturation-intensity (HSI) color space, and identifying a red eye region in a digital image. Using HSI criteria, identified regions are filtered to discard areas unlikely to be the result of red eye effect, and then a plurality of algorithms are used to apply a color correction to each pixel in the identified red eye region. The color correction manipulates each pixel of the red eye region remove the red eye effect. The method is automatic, and requires no input from a user to define the red eye region, to identify the true color of the red eye region, or to apply the color correction.